Jim March

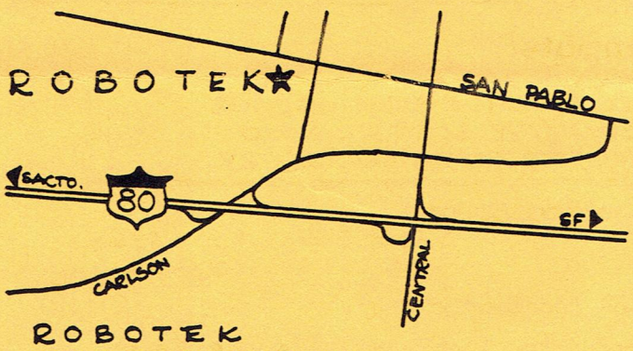
BAZUG

JUNE/JULY 1982
VOLUME: 1, NUMBER: 3

BAY AREA ZX80/81 USER'S GROUP

Next Meeting

THURSDAY JULY 15, 1982



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AGENDA

- Micro Developments HARDWARE DEMONSTRATION
  I/O A/D-D/A BOARDS
- Jim March ASSEMBLY LANGUAGE
- Program Exchange COPY AS MANY PROGRAMS AS YOU CAN TO SHARE
- OPEN DISSCUSSION

MEETING STARTS 7:00 PM!

COPTER By Bruce Lynn for ZX81 1K RAM

```
10 SLOW
20 LET B=20
30 LET A=0
40 PRINT AT A,B-1;" -+- "
50 PRINT AT A+1,B;" 0-*"
60 PRINT AT A+2,B;"-- "
70 IF INKEY$<>" " THEN GOTO 160
80 PRINT AT A,B-1;" --+-- "
90 PRINT AT A+1,B;" 0-+"
100 IF INKEY$<>" " THEN GOTO 160
110 PRINT AT A,B-1;" -+- "
120 IF INKEY$<>" " THEN GOTO 160
130 PRINT AT A,B;" = "
140 IF INKEY$<>" " THEN GOTO 160
150 GOTO 40
160 LET A$=INKEY$
170 PRINT AT A,B-1;"5 SPACES"
180 PRINT AT A+1,B;"4 SPACES"
190 PRINT AT A+2,B;"4 SPACES"
200 IF A$="5" THEN
    LET B=B-1
210 IF A$="8" THEN
    LET B=B+1
220 IF A$="6" THEN
    LET A=A+1
230 IF A$="7" THEN
    LET A=A-1
240 GOTO 40
```

RUN ... INCORPORATE INTO A GAME PROGRAM

SPECTRUM UPDATE

FROM THE MAY 5 ISSUE OF ELECTRONICS

... available with either 16- or 48-K bytes of random access memory, the ZX Spectrum is built around the same Z80A microprocessor as the ZX81.

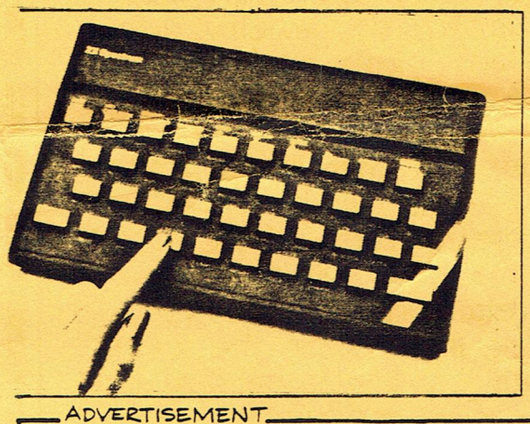
It sports a standard type-writer-sized keyboard with 40 movable keys, a sound generator, and a 16-K ROM that contains a Basic interpreter, character set, operating system, and monitor. It all fits into a package 8½ by 5 by 1 inch.

The new ROM gives the Spectrum its eight-color graphics capability. It operates with a matrix of 256 by 176 picture elements that are memory-mapped into RAM. The display format has 24 lines of 32 characters and normal and extra brightness, as well as a flashing or steady cursor.

... the machine uses ASCII representation of characters, unlike the ZX81... Data transfer across the cassette interface is at 1,500 bits/s.

The basic 16-K machine (will) sell for about $221, the microfloppy for under $90, the 48-K unit for about $309.

... the Spectrum should be on the U.S. market late this year.



Bigger baby. Sinclair ZX Spectrum personal computer has a standard typewriter-sized 40-moving-key ASCII keyboard. The price with a 16-K RAM is about $220.

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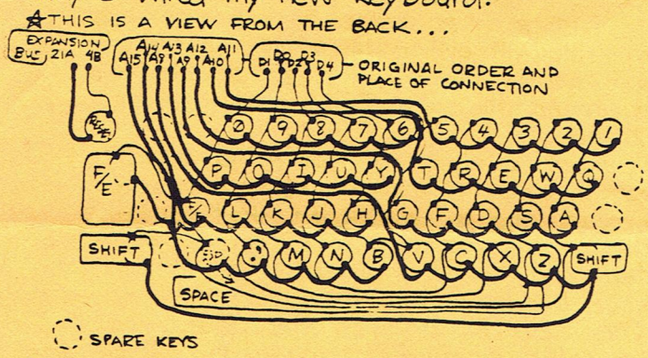
HOW I MADE MY FULLSIZE KEYBOARD

BY RICK LINK

I started on my keyboard with little experience in electronics and much enthusiasm. I had two major constraints – cost and simplicity. I did find an article in the March 82 Byte about adding a keyboard to a ZX80; I have a ZX81. I made several calls to find surplus keyboards and ended up buying one from Mike Quinns near the Oakland Airport (look in the yellow pages) for $10. Here is the way I wired my new keyboard:



I xeroxed the keyboard on page 13 of the ZX81 handbook and contact cemented to the key caps. THERE IS AN ARTICLE IN THE LATEST SYNC ON THIS SUBJECT. (MAY/JUNE 82)

TIMEX SINCLAIR 1000

ARTICLE CONDENSED FROM SYNC MAY JUNE 1982

... Sales will begin in July through the more than 100,000 Timex retail outlets, including computor stores, consumer electronics, jewelry, drug, and department stores and chains.

... Sinclair's mail order sales of the ZX81 will be phased out as Timex begins its marketing program.

... the new machine will have 2K RAM instead of the current 1K on the ZX81.

... the new machine will sell for a suggested retail price of $99.95 instead of the $149.95 for the ZX81.

... Peripherals ... will also be sold by Timex ... The first one available is the 16K RAM expansion module for $49.95. In the fourth quarter of 1982 a printer and a telephone modem are expected to go on sale for $99.95 each.

Timex plans to supplement the hardware offerings with a range of software, including business, personal financial management, education, and entertainment. The price range of the programs is expected to be from $9.95 to $19.95.

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WANTED!

Your advertisements in the BAZUG newsletter. Hardware, software, systems, etc. We now reach over 50 individuals with common interests in computers, not just the ZX81! LOW FEES CONTACT EDITOR

BAZUG IS THE NEWSLETTER OF THE BAY AREA ZX80/81 USER'S GROUP.

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EDITOR – RICK LINK

Please send all articles, questions, advertisements to the editor:

Rick Link, BAZUG
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Connector Hardware (specify needs)		$4 → $6 + $1.50 shipping

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? QUESTION BOX ??

SEND ANSWERS OR QUESTIONS TO EDITOR

Q: Does anybody have some short programs that illustrate the difference in speed between BASIC and machine language – as in a moving graphics game?

A: ?

Q: Has anyone purchased software from SYNC ads on from Sinclair directly and if you have what is your opinion/assessment?

A: ?

Last Week...

- Jim March offered assembly Language coaching.
- Group decided to continue newsletter and sell advertising space.
- We have only $4.30 in our account – dues are $1.00 a month or $6.00 for six months
- We need more direction as a club... come with needs and ideas next week.